

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 8-11, filed July 23, 2008, with respect to the rejection(s) of claim(s) 1, 9, 19, and 24 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Casey'695 US Patent (6,097,499).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kane'014 (U.S. Patent 6,112,014) in view of Casey'695 (US Patent 6,452,695) and in further view of Casey'499 (US Patent No. 6,097,499)

Regarding claim 1, Kane'014 teaches a photocopier (number 10 in Figure 1) configured to host at least one external output device, (i.e., see output port in column 4, line 31, and number 52 in Figure 4) the photocopier comprising: an integrated imaging device (number 20 in Figure 1) configured to provide a first signal corresponding to an image; (i.e. see scanning means in column 3, lines 63-66) an integrated output device (number 40 in Figure 1 and see printing means in column 3, lines 63-66)); at least one output port (number 52 in Figure 4) configured to

electrically couple to the at least one external output device; (i.e. see output port in column 4, lines 31-34) and an image data switching unit (number 60) configured to selectively switch a second signal corresponding to the image between the integrated output device and the at least one output port; (i.e. see selection means in column 4, lines 45-49).

Kane'014 does not teach a controller to electrically couple to a peripheral device external to and separate from the photocopier, the controller to receive image data from the peripheral device, the image data preformatted for the at least one external output device, the controller further to transmit the image data received from the peripheral device to the at least one external output device, the at least one external output device printing the image data.

However, Casey'695 does teach a controller (number 120 in Fig. 2) to electrically couple to a peripheral device, (number 300 in Fig. 1), external to and separate from the photocopier, (i.e. see I/O controller in column 3, lines 40-44), the controller to receive image data from the peripheral device, (i.e. see exchange of information in column 3, line 51) the controller further to transmit the image data received from the peripheral device to the at least one external output device, the at least one external output device printing the image data, (i.e. see printed by printer in column 2, lines 65-67).

The combination of Kane'014 and Casey'695 fail to teach the image data as received from the peripheral device being preformatted for the at least one external output device instead of the image data having to be formatted by the controller for the at least one external output device after the controller receives the image data from the peripheral device.

However, Casey'499 teaches the image data as received from the peripheral device being preformatted for the at least one external output device instead of the image data having to be

formatted by the controller for the at least one external output device after the controller receives the image data from the peripheral device, (preformatted print data, column 11, line 39).

At the time when the invention was made, it would have been obvious to one of ordinary skill in the art to combine the controller taught by the Casey'695 reference with the photocopier taught by the Kane'014 reference. The suggestion/motivation for doing so would have been to increase the flexibility of normal multi-function devices, (i.e. see column 1, lines 46-56 in Casey'695 reference). In addition, it would have been obvious to one of ordinary skill in the art to combine the Casey'695 and Kane'014 reference with the Casey'499 reference because the use of preformatted data in a printing system would have been an obvious improvement at the time of the invention. The use of preformatted data would have allowed the system to be faster and increase throughput of print data.

Regarding claim 2, Kane'014 teaches the integrated imaging device comprises a scanner configured to obtain the image by optically scanning an object, (i.e. see scanning means in column 4, line 3).

Regarding claim 4, Kane'014 teaches wherein the integrated output device (i.e. printing means in column 4, lines 19-23) and the at least one external output device are each selected from a group comprising a copier output system, a laser printer, an inkjet printer and a dot matrix printer, (i.e. other sources in column 4, lines 25-28).

Regarding claim 5, Casey'695 teaches a photocopier further comprising a user interface (number 110 in Fig.2) configured to select at least one output characteristic, (i.e. control panel in column 3, lines 34-39).

Regarding claim 6, Kane'014 teaches the photocopier wherein the controller (memory controller in Fig. 5) is electrically coupled to the integrated imaging device (number 20 in Fig. 5), the integrated output device (number 40 in Fig.5) and the image data switching unit (I/O Logic in Fig. 5), and the controller is configured to convert the first signal to the second signal and to selectively switch the image data switching unit, (i.e. selection means in column 4, lines 45-49).

Regarding claim 7, Kane'014 teaches the photocopier wherein the controller (memory controller) comprises a processor (CPU in Fig. 5) and a memory device, (RAM and ROM Firmware in Fig. 5).

Regarding claim 8, Kane'014 teaches the photocopier wherein the controller is further configured to selectively transmit the first signal and the second signal to the peripheral device (Optical ROM or Floppy Disk in Fig. 5); and selectively receive the first signal and the second signal from the peripheral device, (i.e. see transmitting means in column 4, lines 34-44 or storage means in column 4, lines 5-9)

Regarding claim 19, Kane'014 teaches an image processing system comprising: a host device comprising: an output port, (number 52 in Fig.5 and see output port in column 4, lines 31-34); a first means for printing, (number 40 in Fig. 1, and see printing means in column 3, lines 63-66); and a switching means for selectively passing image data to the output port and the first means for printing, (i.e. selection means in column 4, lines 45-49); a second means for printing, wherein the second means for printing is electrically attachable to the output port of the host device and is external to the host device, (i.e. see outside sources in column 4, lines 31-34); and wherein the switching means is further for receiving the image data from the peripheral device means, (i.e. receiving of facsimile or modem sent message in column 4, lines 39-43) and for printing the image data received from the peripheral device means to the second means for printing,(i.e. selection means in column 4 lines 45-49), the second means for printing then printing the image data, (i.e. outside source in column 4, lines 23-33).

Kane'014 does not teach a peripheral device means external to and separate from the host device, the peripheral device means electrically coupled to the host device, the peripheral device means for storing image data preformatted for the second means.

However, Casey'695 does teach a peripheral device (number 300 in Fig. 1) means external to and separate from the host device, (i.e. see I/O controller in column 3, lines 40-44), the peripheral device (number 300 in Fig. 1) means electrically coupled to the host device (number 100 in Fig. 1 which clearly shows the connection between the image input device and adapter device) , the peripheral device means for storing image data (i.e. other device in column 2, line 60) preformatted for the second means, (i.e. corresponding print data in column 4, lines 22-25).

The combination of Kane'014 and Casey'695 fail to teach the image data as received from the peripheral device being preformatted for the at least one external output device instead of the image data having to be formatted by the controller for the at least one external output device after the controller receives the image data from the peripheral device.

However, Casey'499 teaches the image data as received from the peripheral device being preformatted for the at least one external output device instead of the image data having to be formatted by the controller for the at least one external output device after the controller receives the image data from the peripheral device, (preformatted print data, column 11, line 39).

At the time when the invention was made, it would have been obvious to one of ordinary skill in the art to combine the controller taught by the Casey'695 reference with the photocopier taught by the Kane'014 reference. The suggestion/motivation for doing so would have been to increase the flexibility of normal multi-function devices, (i.e. see column 1, lines 46-56 in Casey'695 reference). In addition, it would have been obvious to one of ordinary skill in the art to combine the Casey'695 and Kane'014 reference with the Casey'499 reference because the use of preformatted data in a printing system would have been an obvious improvement at the time of the invention. The use of preformatted data would have allowed the system to be faster and increase throughput of print data.

Regarding claim 20, Kane'014 teaches the image processing system wherein the host device further comprises an imaging means for providing a first electrical signal, wherein the first electrical signal is representative of an image, (i.e. scanning means in column 4, lines 3-5).

Regarding claim 21, Casey'695 teaches the image processing system, wherein the host device further comprises a processing means (number 140 in Fig. 2) for converting the first electrical signal into a second electrical signal configured to be processed by at least one of the first means for printing and the second means for printing, (i.e. step 640 in Fig.4 and column 6, lines 61-65)

Regarding claim 22, Casey'695 teaches the image processing system wherein the host device further comprises an interface means (number 11 in Fig. 2) for entering parameters used to control the switching means, (i.e. control panel in column 3, lines 34-39).

3. Claims 9-18 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura'693 (U.S. Patent No. 5, 854,693) in view of Casey'695 (U.S Patent 6,452,695) and in further view of Casey'499 (US Patent No. 6,097,499)

Regarding claim 9, Yoshiura'693 teaches method for copying a document using an image processing system including an integrated imaging device (i.e. scanner section 31 in column 9, lines 20-25), an integrated output device (i.e. laser printer section 32 in column 9, lines 20-25) and at least one external output device (i.e. see transmission apparatus that allows transmitting and receiving image data from an outside device in column 3, lines 21-25), the method comprising: determining an output path based upon at least one output characteristic, (i.e. see

performing the requested image processing function based on the function data in column 4, lines 43-50); producing a first signal corresponding to an image of the document, (i.e. see original image information (image data) in column 9, lines 54-67); converting the first signal to a second signal, (i.e. see processed image data in column 4, lines 6-10); and directing the second signal to the output path, (i.e. see returned processed image data and outputted by image recording section in column 4, lines 61-66)

Yoshiura'693 does not teach receiving image data from a peripheral device external to and separate from the image processing system, the image data preformatted for the external output device, the peripheral device being a storage device without printing capability and without telecommunications capability; and, transmitting the image data received from the peripheral device to the external output device, the external output device printing the image data.

Casey'695 teaches the method of receiving image data from a peripheral device external to and separate from the image processing system (i.e. see I/O controller in column 3, lines 40-44), the peripheral device being a storage device without printing capability and without telecommunications capability, (i.e. other device in column 2, line 60); and, transmitting the image data received from the peripheral device to the external output device, the external output device printing the image data, , (i.e. see printed by printer in column 2, lines 65-67).

The combination of Yoshiura'693 and Casey'695 fail to teach the image data as received from the peripheral device being preformatted for the at least one external output device instead of the image data having to be formatted by the controller for the at least one external output device after the controller receives the image data from the peripheral device.

However, Casey'499 teaches the image data as received from the peripheral device being preformatted for the at least one external output device instead of the image data having to be formatted by the controller for the at least one external output device after the controller receives the image data from the peripheral device, (preformatted print data, column 11, line 39).

At the time when the invention was made, it would have been obvious to one of ordinary skill in the art to combine the controller taught by the Casey'695 reference with the photocopier taught by the Yoshiura'693 reference. The suggestion/motivation for doing so would have been to increase the flexibility of normal multi-function devices, (i.e. see column 1, lines 46-56 in Casey'695 reference). In addition, it would have been obvious to one of ordinary skill in the art to combine the Casey'695 and Yoshiura'693 reference with the Casey'499 reference because the use of preformatted data in a printing system would have been an obvious improvement at the time of the invention. The use of preformatted data would have allowed the system to be faster and increase throughput of print data.

Regarding claim 10, Yoshiura'693 teaches the method wherein determining the output path comprises: selecting the at least one output characteristic, (i.e. operator inputs in column 20, line 27); and comparing the at least one output characteristic to the functionality of the integrated output device and the at least one external output device, (i.e. PCU selects in column 20, lines 22-25).

Regarding claim 11, Yoshiura'693 teaches the method further comprising defining the output path to include at least one of the integrated output device and the at least one external

output device such that the output path provides the at least one output characteristic, (i.e. PCU selects in column 20, lines 22-25).

Regarding claim 12, Yoshiura'693 teaches the method further comprising configuring the integrated imaging device and the at least one of the integrated output device and the at least one external output device included in the output path to provide the at least one output characteristic, (i.e. transmitted image data in column 20, lines 44-46).

Regarding claim 13, Yoshiura'693 teaches the method wherein selecting the at least one output characteristic comprises specifying a characteristic selected from the group comprising copying speed, output media size, output media weight, output media color, output media material, output font, output color, output color resolution, copying resolution, and printing resolution, (i.e. sharpness, viewed as a printing resolution, in column 19, line66 – column 20 line 18).

Regarding claim 14, Yoshiura'693 teaches the method wherein producing the first signal comprises: optically scanning the document with the integrated imaging device to produce an image of the document; and converting the image to a digital signal, (i.e. electric image signal in column 9, lines 54-67).

Regarding claim 15, Casey'695 teaches the method wherein converting the first signal to the second signal comprises processing the first signal using printer driver software compatible

with at least one of the integrated output device and the at least one external output device, (i.e. generate print data in column 4, lines 60-64).

Regarding claim 16, Yoshiura'693 teaches the method wherein directing the second signal to the output path comprises routing the second signal to at least one of the integrated output device and the at least one external output device, (i.e. image data transmitted in column 20, lines 33-46).

Regarding claim 17, Yoshiura'693 teaches the method further comprising printing a portion of the second signal with the at least one of the integrated output device and the at least one external output device, (i.e. distributed to the digital copying machines in column 20, lines 33-46).

Regarding claim 18, Yoshiura'693 teaches the method wherein directing the second signal to the output path comprises routing the second signal to the peripheral device, (i.e. image data transmitted in column 20, lines 33-46)..

Regarding claim 24, Yoshiura'693 teaches computer readable media including computer executable instructions for performing, in relation to a photocopier: selecting at least one output characteristic for a copy job; (i.e. inputting an instruction in column 4, lines 42-45) comparing the functionality of a plurality of output paths to the selected at least one output characteristic; (i.e. see performing the requested image processing function based on the function data in

column 4, lines 43-50); and directing at least a portion of the copy job output to an external output device, (i.e. see returned processed image data and outputted by image recording section in column 4, lines 61-66).

Yoshiura'693 does not teach receiving image data from a peripheral device external to and separate from the image processing system, the image data preformatted for the external output device, the peripheral device being a storage device without printing capability and without telecommunications capability; and, transmitting the image data received from the peripheral device to the external output device, the external output device printing the image data.

Casey'695 teaches the method of receiving image data from a peripheral device external to and separate from the image processing system (i.e. see I/O controller in column 3, lines 40-44), the peripheral device being a storage device without printing capability and without telecommunications capability, (i.e. other device in column 2, line 60); and, transmitting the image data received from the peripheral device to the external output device, the external output device printing the image data, , (i.e. see printed by printer in column 2, lines 65-67).

The combination of Yoshiura'693 and Casey'695 fail to teach the image data as received from the peripheral device being preformatted for the at least one external output device instead of the image data having to be formatted by the controller for the at least one external output device after the controller receives the image data from the peripheral device.

However, Casey'499 teaches the image data as received from the peripheral device being preformatted for the at least one external output device instead of the image data having to be

formatted by the controller for the at least one external output device after the controller receives the image data from the peripheral device, (preformatted print data, column 11, line 39).

At the time when the invention was made, it would have been obvious to one of ordinary skill in the art to combine the controller taught by the Casey'695 reference with the photocopier taught by the Yoshiura'693 reference. The suggestion/motivation for doing so would have been to increase the flexibility of normal multi-function devices, (i.e. see column 1, lines 46-56 in Casey'695 reference). In addition, it would have been obvious to one of ordinary skill in the art to combine the Casey'695 and Yoshiura'693 reference with the Casey'499 reference because the use of preformatted data in a printing system would have been an obvious improvement at the time of the invention. The use of preformatted data would have allowed the system to be faster and increase throughput of print data.

Regarding claim 25, Yoshiura'693 teaches the computer readable media, wherein selecting the at least one output characteristic comprises specifying a characteristic selected from a group comprising copying speed, output media size, output media weight, output media color, output media material, output font, output color resolution, optical resolution, and printing resolution, (i.e. sharpness, viewed as a printing resolution, in column 19, line66 – column 20 line 18).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAWRENCE E. WILLS whose telephone number is (571)270-3145. The examiner can normally be reached on Monday-Friday 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on 571-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LEW
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